BBS Express!™ Professional

Orion Micro Systems

Features

- 32 Message Bases
- 32 File SIG Areas w/ file descriptions
- 32 Command Sec Levels
- 256 User Security Flags
- 516,128 Files Online For Download

- Full Online User Editor
- Event Scheduler - run up to 30 events automatically
- ExpressNET - networking
- Print Userlog to Printer or Disk File for downloading and printing on another system.
- Online Dos Shell to access DOS functions online

System Requirements

- **Atari 800XL or 130XE**
- **Hard Drive recommended**
- **SpartaDOS 3.2**
- **Rtime-8 Optional**
- **MIO, 850, PRC interface w/ RS232 Hayes Compatible modem**

BBS Express! PRO gives you the power you always dreamed of in an Atari 8-bit BBS. With over 200K of code, the only limitation you will encounter is your imagination.

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BBS Express!

Professional

User Manual

BBS Express! Professional

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Midlothian, Virginia 23113

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BBS Express! Professional V1.0
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BBS Express! Professional
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Introduction

Welcome to **BBS Express! Professional**. We think you will find this BBS to be the most powerful *ever* written for the Atari 8-bit line of computers.

We know you are anxious to get the board up and running, but please take the time to read through the manual completely before attempting to configure the board. An overall understanding of how the board is set up and how it runs will help you when it comes time to decide where to put things on your drives.

Throughout this manual, we will refer to SpartaDOS's command structure with the understanding that you are familiar with how to use SpartaDOS. We won't attempt to teach you how to use SpartaDOS within the context of this manual. Assuming you have a working knowledge of the DOS, you should have no trouble setting up and running the BBS. If you are a novice SpartaDOS user, keep your SpartaDOS manual handy for quick reference.

We will be maintaining an **'Official'** Pro Support board for the exclusive use of registered owners. The phone number is **804-744-8897**. You may call in Atascii or Ascii at 300, 1200 or 2400 baud. After registering on the board, you will be disconnected. You may call back the next day and will have been validated by then. This support board will have placed on it any upgrades to the various modules as well as new modules as they are written.

Thanks again for purchasing **BBS Express! Professional**. Drop us a line if you would like to see something added to the board that would be of benefit to the majority of sysops running the system. We will be adding commands and upgrading the program from time to time, so check in with the support board periodically for the latest news on improvements.

System Requirements

BBS Express! PRO's power is made possible by tailoring the program to a specific CPU group and a specific DOS. You *must* use SpartaDOS 3.2 in order to run BBS Express! PRO. We cannot say at this writing if the yet-to-be-released SpartaDos X cartridge can be used with PRO. Assuming the cartridge is totally compatible with 3.2, it will work. By the very nature of SpartaDOS, you are limited to using an Atari 800XL or 130XE. PRO will not run on an 800 due to the fact that SpartaDOS won't run on it. Any memory upgrade available for the 800XL or 130XE should work with PRO as long as you install your ramdisk handler before running the BBS program.

If you own the Rtime8 clock cartridge, PRO will take full advantage of it. If you don't own one, you will need to set the SpartaDOS software clock before running PRO. In either case, the **TDLINE.COM** file should be run prior to running the board.

We recommend using a hard drive to run PRO, but it isn't absolutely necessary. PRO's commands are loaded into memory as required, so the slower your storage device, the longer it will take to load in these commands. The best solution, even when running with a hard drive, is to keep the BBS's command subdirectory on the ramdisk. This will afford the best response time to the user.

BBS Express! PRO's shell loads into memory at $3000. This is the portion of the BBS that always remains in memory and has control most of the time. You must load the **RS232.COM** and **TDLINE.COM** from the SpartaDOS disk, along with the **BBSPREP.CMD** file from your Pro disk, before PRO will run. These can be included in your **STARTUP.BAT** file. Optimally, you should have room to load your favorite accessories (such as a ramdisk handler) as long as MEMLO goes no higher than $3000. The **BBSPREP.CMD** file must be the *last* file that alters MEMLO to be loaded.

Any Hayes compatible modem can be used with BBS Express! PRO. How Hayes compatible? Well... the modem must be able to answer the phone with an **ATA** command and must be able to hang up the phone when the DTR line drops low. Not too much to ask a BBS modem to do. If you have a modem that uses the extended command set, PRO will auto-detect the callers baud rate by detecting the CONNECT, CONNECT 1200 and CONNECT 2400 messages returned by modem.

What's On The Disks

BBS Express! PRO is shipped to you on 2 single density disks.

Disk 1 contains:

Front Side	BBS.COM	- the BBS shell module.
	BBSPREP.COM	- prepares system to run BBS.
	SYSEDIT.COM	- the syseditor.
	MAKEULOG.COM	- userlog creation program.
	MAKEMSGB.COM	- message base creation program.
	UEXTEND.COM	- extends the size of the userlog
	MAKESUB.BAT	- create subdirectory batch file.
Back Side	Data>	- Data files for support programs.
	Help40>	- All the atascii and ascii help files for 40 column users.
	HelpB0>	- All the atascii and ascii help files for 80 column users.

Disk 2 contains: - All the system command modules that are required for PRO to run.These should be placed in the PRO>COMMANDS> subdirectory on your hard drive and ramdisk.
Front & Back

Command Modules

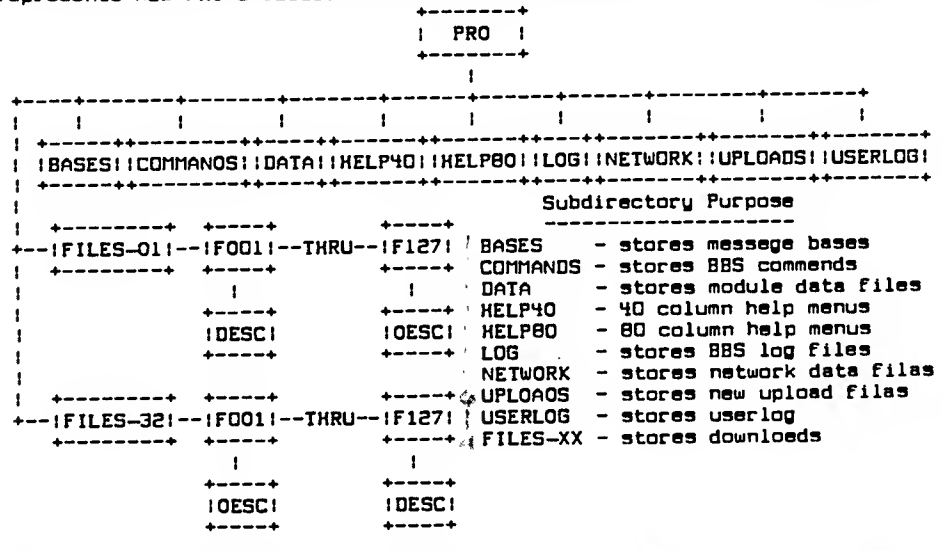
ATASCII	CMD	BROWSE	CMD	CALLSYS	CMD
*D	CMD	DOSSHELL	CMD	*EDITFILE	CMD
FEEDBACK	CMD	*FILESTAT	CMD	FINDFILE	CMD
GOODBYE	CMD	LOGIN	CMD	LOGOFF	CMD
LOGON	CMD	LOGOUT	CMD	MAIN	CMD
MSGBASE	CMD	NETCALL	CMD	*NETEDIT	CMD
NETPREP	CMD	NETUPDT	CMD	*NEWFILES	CMD
PARMEDIT	CMD	READMAIL	CMD	SCANMARK	CMD
SENDMAIL	CMD	*UEDITOR	CMD	*ULBACKUP	CMD
*ULPRINT	CMD	*ULPURGE	CMD	USEARCH	CMD
USHELL	CMD	*VDEL	CMD	*VIEWEVNT	CMD
WAITCALL	CMD	*WHEREIS	CMD	WHOCALL	CMD
WHOMAINT	CMD	*XMODEM	CMD		

NOTE: Commands with an '*' beside them are intended to be 'Sysop Commands' to either be run from the Dos Shell or the Event Scheduler.

The following topics are organized in such a manner that each step is performed before proceeding to the next.

The System Directories

BBS Express! PRO uses subdirectories extensively. The entire board and all its files reside under one subdirectory in the main directory. To illustrate this, look at the diagram below. This pictorially rapresente how PRO's subdirectories are structured.



As you can see, each of these subdirectories reside under the subdirectory called **PRO** in the main directory. While each of these subdirectories may physicelly reside on the same drive, they don't have to. You can put the **COMMANDS** directory on drive 0 and the **UPLOAD** directory on drive 2 and the FILES-XX subdirectories on drives 4, 5 and 6. The key to doing this is that each drive that you will be using with the BBS has a subdirectory called **PRO** defined in the main directory of that drive and the BBS subdirectories reside in this **PRO** subdirectory.

To make the task of creating these subdirectories easier, we have provided a batch file on the master disk called **MAKESUB.BAT** which will create all the necessary subdirectories for you. You must edit this batch file with a text editor and change the drive numbers to the drive where you want the various subdirectories located. This batch file will also make the first three subdirectories required for the first three download file areas. You may adjust this to your own requirements prior to running the batch file, depending on how many download file areas you are setting up for your system.

After you have created all the directories, it is recommended that you copy the files contained on the master disks to the appropiate subdirectories you just created. The master disks contain all the files within the subdirectories where they should reside, so a wildcard subdirectory copy is acceptable. Make yourself a list of where you decidad to place the subdirectories. This will aid you in the next step of creating the SYSDATA.DAT file.

Creating The Sysdata.Dat File

The SYSDATA file contains all the system parameters that PRO needs to know where to find things. This file is created and maintained using the Syseditor program which is discussed in detail below.

Sysdata Editor

The Sysedit.Com utility is a stand alone program which is used to create and later edit the Sysdata.dat file. This file contains all the system data parameters which BBS Express! Professional uses to determine where required system files are located and how to configure the system setup. Using the program is pretty intuitive, but a detailed explanation of the various options is provided below.

Sysedit.Com is loaded from the SparteDOS command prompt by typing SYSEDIT and pressing return. Make sure that **BASIC is disabled**. When the program finishes loading, you will be prompted to enter a drive number for the SYSDATA.DAT file. If SYSEDIT can not find the sysdata file on that drive, you will be prompted with *'Create A New Sysdata ?'*. Respond Yes or No. No will exit back to the DOS prompt and Yes will initialize a new sysdata file for editting. When you exit the Syseditor (Option 9 from Main Menu), you will be prompted for a filename to save the configuration or hit return to save under the displayed input filename. The SYSDATA.DAT file should *always* be saved in the PRO subdirectory on the drive that you plan to boot the board from using the name SYSDATA.DAT.

After specifying the drive number for the Sysdata.dat file, the Main Menu will appear and allow the following options:

Main Menu
[1] System Parameters
[2] Drive Parameters
[3] Main Commands
[4] File Sig Parameters
[5] System Baud Rates
[6] Misc. Parameters
[7] ExpressNET Parameters
[8] Event Scheduler
[9] Exit Sysdata Editor

Each of these options is discussed below. An asterisk will appear to the left of the menu number if you have entered that option during this editing session. While in any option 1-8, you may return to the Main Menu by pressing the Escape Key.

[1] System Parameters

```
[A]  System Hi Message.... 99999
[B]  Total System Calls... 99999
[C]  Calls Today.......... 99999
[D]  Feedback Mode........ xxxxxx
[E]  Allow Handles........ xxx
[F]  Interface Type....... xxx
[G]  Use File Sig Desc.... xxx
[H]  Secondary Password
       xxxxxxxxxxxxxx
[I]  Board Name for Status Line
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
[J]  Sysop Name for Status Line
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

[A] **System Hi Message** - This is the Hi message counter. If you are just starting out with PRO, this field should be set to 1. The board increments this number for each message or E-mail posted on the system. Press return after entering a new value.

[B] **Total Calls** - Total system calls to date that your BBS has received. If just starting a BBS, this number should be left zero. Otherwise, specify your current system calls in this field. Press return after entering a new value.

[C] **Calls Today** - Total calls your system has received today. Press return after entering a new value.

[D] **Feedback Mode** - Specifies whether the system will direct sysop feedback to Email or is turned off. This field is toggled by hitting the option letter.

[E] **Allow Handles** - This field toggles between YES and NO. It is used to specify whether you want to allow the use of handles on your system.

[F] **Interface Type** - This field toggles between MIO, PRC and BSO. Set to the interface type that you are using.

[G] **Use File Sig Desc** - This field toggles between YES and NO. Specifies whether you want to use descriptions with download files or not.

[H] **Secondary Password** - Specifies the current sysop level password. This field may be up to 15 characters. Any user with sysop access will be required to enter this password when accessing the system remotely. When finished editing this field, press return.

[I] **Board Name for Status Line** - Specifies a string of up to 36 characters for board name which will display in the top status line while the board is running. This field is automatically centered when editing is terminated with a return.

[J] **Sysop Name for Status Line** - Specifies a string of up to 36 characters for sysop name which will display in the top status line while the board is running. This field is automatically centered when editing is terminated with a return.

[2] Drive Parameters:

```
  [A]  UserLog Drive........ Dx:
  [B]  Help4D Drive......... Dx:
  [C]  Help80 Drive......... Dx:
  [D]  Command Drive........ Dx:
  [E]  System Log Drive..... Dx:
  [F]  System Data Drive.... Dx:
  [G]  Upload Drive......... Dx:
  [H]  Msg Bases Drives
----+----1----+----2----+----3-E
OOODDOODDDDDOODDDOODDDOOOODDOOOOO
  [I]  File Sig Drives
----+----1----+----2----+----3--
ODOOOOOOOOOOODOOODOOOOODDOODOOOO
```

[A] thru [G] - These options are used to specify the drive number where each of the required system directories may be found. To change drive numbers, press the letter which you wish to change until the drive number you want appears on the screen.

NOTE: Option E allows the drive to be set to 0. If the Log Drive is set to 0, this will turn OFF the logging of callers to the call log.

[H] **Message Base Drives** - Specifies the drive number where each message base may be found. Enter a drive number (1 - 8) for each active message base. If a message base does not exist or is currently inactive, specify a 0 drive number.

[I] **File Sig Drives** - Specifies the drive number where each file SIG may be be found. Enter a drive number (1 - 8) for each active file SIG. If a file SIG does not exist or is currently inactive, specify a 0 drive number.

[3] Main Commands:

Num	Key	Lvl	Typ	.CMD
#01	x	0	x	xxxxxxxx
#02	x	0	x	xxxxxxxx
#03	x	0	x	xxxxxxxx
#04	x	0	x	xxxxxxxx
#05	x	0	x	xxxxxxxx
#06	x	0	x	xxxxxxxx
#07	x	0	x	xxxxxxxx
#08	x	0	x	xxxxxxxx
#09	x	0	x	xxxxxxxx
#10	x	0	x	xxxxxxxx
#11	x	0	x	xxxxxxxx
#12	x	0	x	xxxxxxxx

The Main Command screen displays up to 35 main command definitions in a scolling mannar. Use the Up/Down arrows to move up and down the commands. When the bottom command is reached and the down arrow is hit again, the next page of commands will appear. Likewise, when the hi-light bar reaches the top command, the previous page will appear, except if you are at the top of page 1. Position the hi-light bar at the command you wish to edit and press return. You may now change the information which pertains to that command. Each commend entry consists of four pieces of information.

Key - Specifies the Key definition. This defines the key as a valid entry from the main command prompt. A dash specifies unused command entries. Any character may be used except dash to specify a valid key. If a dash is keyed, the command is reset to an invalid command.

Lvl - A value between 0 and 32 to specify the security level required to access this key function. **Note: 32 is sysop level.** This field corresponds to the user's "Command Security Level" settings. Example: If you set a command to level 3, the user's commend level 3 flag would have to be turned on for them to be able to execute the function.

Typ - Specifies the type of file that is contained in the .CMD field. Hitting return on this field will default to type C.

C - denotes that this is a command (executable .cmd file).
T - denotes that this is a text or menu file to be displayed.

.CMD - Specifies the filename (no extender) which will be viewed or executed if the key is pressed by the user. If only return is pressed on this field, the commend edit is aborted and the original command will reappear unchanged.

[4] File Sig Parameters:

Num	File Sig Name
#01	xxxxxxxxxxxxxxxxxxx
#02	xxxxxxxxxxxxxxxxxxx
#03	xxxxxxxxxxxxxxxxxxx
#04	xxxxxxxxxxxxxxxxxxx
#05	xxxxxxxxxxxxxxxxxxx
#06	xxxxxxxxxxxxxxxxxxx
#07	xxxxxxxxxxxxxxxxxxx
#08	xxxxxxxxxxxxxxxxxxx
#09	xxxxxxxxxxxxxxxxxxx
#10	xxxxxxxxxxxxxxxxxxx
#11	xxxxxxxxxxxxxxxxxxx
#12	xxxxxxxxxxxxxxxxxxx

The File Sig screen displays up to 32 file sig definitions in a scrolling manner. Use the Up/Down arrows to move up and down the file sigs. When the bottom file sig is reached and down arrow is hit again, the next page of file sigs will appear. Likewise, when the hi-light bar reaches the top file sig, the previous page will appear, except when on page 1. To edit any file sig entry, position the hi-light bar at the file sig you wish to edit and press return. You may now change the file sig name. Pressing return without keying any change will leave the original sig name intact and unchanged. After editing the file sig name, press return to terminate editing. Each file sig name may have up to 20 characters. Editing automatically ends if you enter your 20th character, so a return would not be necessary in that case.

[5] System Baud Rates:

[A] MAX Baud Rate..... xxxx
[B] MIN Baud Rate..... xxxx
[C] Starting Baud Rate... xxxx

[A] **Max Baud Rate** - Toggles the maximum baud rate. Baud will toggle up to the next baud rate each time the key is pressed. Set the maximum baud rate your modem supports. (3/12/24/96)

[B] **Min Baud Rate** - Toggles the minimum baud rate. Baud will toggle up to the next baud rate each time the key is pressed. Set the minimum baud rate you wish to support. (3/12/24/96)

[C] **Starting Baud Rate** - Toggles the starting baud rate. Baud will toggle up to the next baud rate each time the key is pressed. Set to the baud rate you want the phone answered. You can not specify a starting baud rate less than minimum or greater than maximum. Starting Baud rate will automatically be set to maximum baud rate if maximum is 2400 or greater. This is usually a modem requirement that the port speed be set to the highest baud speed for the modem to answer the phone, so we set this for you if maximum is above 1200. You can not override this feature.

[6] Misc. Parameters:

[A] Caller Type..... xxxxxxxxxxxx
[B] Display Columns.. xx
[C] Change Foreground Color
[D] Change Background To Next Color
[E] Change Background To Next Hue
[F] Change Border To Next Color
[G] Change Border To Next Hue
[H] Set Border To Background Color
[I] Reset To Default Color Set

[A] **Caller Type** - Toggles between Atascii Only and Ascii/Atascii. This allows you to set the caller type the board will accept at logon.

[B] **Display Columns** - Toggles between 40 and 80 columns. (Tech Note: Future enhancement. Version 1.0 currently does not use this field.)

[C] Change Foreground Color
[D] Change Background To Next Color
[E] Change Background To Next Hue
[F] Change Border To Next Color
[G] Change Border To Next Hue
[H] Set border To Background Color
[I] Reset To Default Color Set

- Options 'C' thru 'I' function as indicated. Press the appropriate option letter to perform the desired function. The color combination that you set on your screen will be the colors displayed while the board is running.

[7] ExpressNET Parameters: [A] Node Number..... xxxxx
[B] Node Name:
xxxxxxxxxxxxxxxxxxxxxxxx
[C] Node City/State:
xxxxxxxxxxxxxxxxxxxxxxxx
[D] Network Drive..... Dx:

[A] **Node Number** - Your BBS node number if you are using the ExpressNET interface feature. Your node number is the serial number found on your master BBS Express! PRO diskette. This is the number by which other ExpressNET systems will know you.

[B] **Node Name** - Your BBS name as you want it to appear in network messages sent to other ExpressNET systems.

[C] **Node City/State** - Your BBS City and State as you want it to appear in network messages sent to other ExpressNET systems.

[D] **Network Drive** - Specifies the drive number where the NETWORK directory may be found. Pressing this letter will increment the drive number.

[8] Event Scheduler

Event Type	Schedule Days S-M-T-W-T-F-S	Hr	Event Name
Every	Y Y Y Y Y Y Y	0	WHOMAINT
Timed	N N N N N N Y	22	ULPURGE
Timed	N N N N N N Y	23	ULBACKUP
OFF	N N N N N N N	0	
OFF	N N N N N N N	0	
OFF	N N N N N N N	0	
OFF	N N N N N N N	0	
OFF	N N N N N N N	0	
OFF	N N N N N N N	0	

The Event Scheduler screen allows you to set up events to run automatically either after every call or on a timed basis. Up to 30 events can be set up to run. The arrow keys allow you to move to the entry you wish to edit. This screen, like previous screens, will move to the next page when the down arrow key is pressed and you are on the last entry on that page. The up arrow key will move you to the previous page when you are on the top entry. Once you are positioned to the entry you wish to edit, pressing the return key will place you in edit mode. The line will clear and a prompt will be displayed for the appropriate entry. If option 2 is selected, the cursor will move to the event name. The 8 character name of the event should then be entered (Refer to the Event Scheduler section for a list of the supplied events on the master disk). If the filename is less than 8 characters, press return, otherwise entry terminates on the 8th character entered. The hi-light bar will re-appear to indicate the entry has been saved in memory. If you select the event as a timed event, you will be prompted for the days and the hour that this event should be run. Hitting a return during days entry will default to a Y entry. The hour should be entered in military time (0-23). If you wish to reset an event to OFF, position to the event entry and hit the return key twice.

Creating The UserLog

Create the userlog by running the program MAKEULOG.COM. You will first be prompted to enter the number of users you want to allow in the userlog. This can be any number up to 65535. To aid you in this decision,1 user record requires 1 double density sector (256 Bytes).

In addition, the system will reserve the first 9 records for it's own use, so the sysop is actually user number 10 and the co-sysop is user number 11. If you do not plan to have a co-sysop, the system still reserves user number 11. The board treats these 2 user id's differently from the rest. As an example of this, user record 10 and 11 are not recorded in the "who's called log" for users to see. This way, you and a co-sysop can pop into the board without alerting users that you were there.

Next, you will be asked to enter the drive number on which to create the userlog. This can be any drive 1-8.

The program will now start creating the userlog assuming that the subdirectory PRO>USERLOG> exists on the drive that you specified. If not, the program will exit back to the DOS prompt allowing you to create the subdirectory or rerun the program selecting a different drive number.

Creating The Message Bases

Create the message bases by running the program MAKEMSGB.COM. You will first be prompted to enter the message base number that you want to create. Hitting return will create the default message base that is displayed on the screen (this always starts at message base #1).

Next, you will be asked for the number of messages that you want in this base. This can be up to 250 messages.

Then, you will be asked for the drive number on which to create this base. Any drive 1-8 may be used.

Next, you will be asked to name the message base. Up to 20 characters may be keyed and may be upper,lower or atascii characters.

Then, you will be asked if you want to allow ATASCII graphics on this base. Enter a 'Y' or 'N'.

Finally, you will be asked for a size (2-9) of the message base. The chart below will aid you in selecting the appropriate size for your needs.

Size Selected	# Of Messages	# Bytes Per Message	Total Base Size
2	100	362	79,360
3	100	618	104,960
4	100	874	130,560
5	100	1130	156,160
6	100	1386	181,760
7	100	1642	207,360
8	100	1898	232,960
9	100	2154	258,560

The number of bytes per message in the chart above represents the number of bytes available when posting a message. If your base size selected was '5', the user would be able to key up to 1130 bytes into the message.

Assuming a message base of 250 messages and size 9, the maximum size of a message base would be 642,560 bytes.

The program will now start creating the message base assuming the subdirectory **PRO>BASES>** exists on the drive you specified. If not, the program will exit back to the DOS prompt, allowing you to create the subdirectory or rerun the program, selecting a different drive number. Once the message base has been created, the base counter increments and the process continues for the next message base.

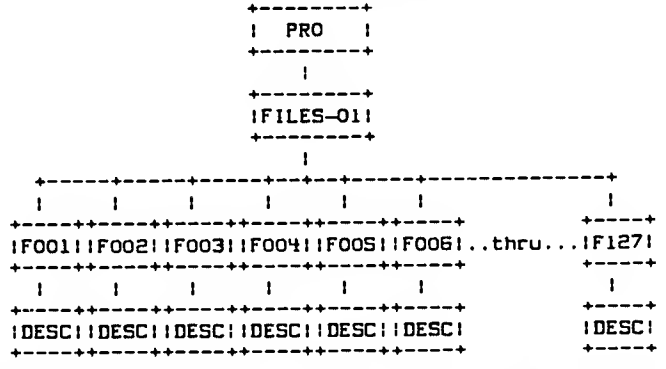
Regardless of how many message bases you decide to have online, remember that you must always create message base 32. This serves as the Email base. Once message base 32 is created, the MAKEMSGB program will exit back to the Dos command prompt.

Creating The File Sigs

BBS Express! PRO supports up to 32 download file sig areas and 1 upload file sig. All uploads go to this one file sig area. They are not visible to the user until validated by the sysop. (Refer to the New Files Validation section for the procedure on validating new uploads).

Each download file sig is actually a subdirectory named *FILES-XX*. XX is the sig number (1 thru 32). Within the FILES-XX subdirectory up to 127 subdirectories can exist named *F001* through *F127*. These subdirectories must be created in sequential numeric order. The actual download files are stored in these subdirectories. Under each of the F001 thru F127 subdirectories are subdirectories called *DESC*. This is where the description to the file is stored. A quick calculation shows 127 subdirectories, each containing up to 127 files, yields space for 16,129 download files per file sig area. With 32 file sig areas, 516,128 files online at one time is possible.

Let's look at one download file sig area pictorially to illustrate this:



Each of the 32 file sig areas is structured exactly like this example, except the FILES-01 subdirectory would be named FILES-02, FILES-03 etc.

Now this may seem like a lot of subdirectories (and it is), but the thing to remember is only the FILES-XX, F001 and the DESC under F001 need to be created initially. The additional F002, F003, etc and DESC under each of them can be created later as you need them. If this still seems a little confusing, you might want to read the section on new files validation for an explanation of how the board will move the new uploads into these file sigs. Once the subdirectories have been properly created, it's not something you have to worry about or remember to get the new files into these areas.

A word of caution... when creating the F001, F002, F003 subdirectories, don't skip a number. The board will be tricked into thinking there are no more subdirectories in the sig area if it encounters a non-existent numeric subdirectory. You can have FILES-01, FILES-10, FILES-20 with gaps in-between but not within those subdirectories. When creating the additional subdirectories, don't forget to create the DESC subdirectory under it so the file descriptions can be saved. The user can still upload files if you forget, but would see an '*Unable to Create Description File*' message when the BBS tries to save the file description.

Creating The Help Menus

The necessary help menus this board requires are on the master diskette in the HELP40 and HELP80 subdirectories. All of these files are text files, and can be edited with any text editor.

PRO has 4 sets of menus available for display. They are based on the caller's video width and translation. The help menus are broken down into 2 subdirectories called HELP40 and HELP80. Within each of these subdirectories are 2 sets of menus distinguished by the extenders .ATA for ATASCII menus and .ASC for ASCII menus. When the user calls for a help file to be displayed, PRO will display the appropriate help file based on the user's current settings. This makes it easy to customize the help files for both 40 and 80 column users as well as ATASCII and ASCII users. The help files provided on the disks are generic in nature, but can be used to get you started. They are intended to be a starting point and can be customized to your liking.

The next page contains a table of variable tags available for use in menus. To aid in the conversion of existing menus, we have included the 1030/850 variable tag equivalent for those of you running the current version of BBS Express!

PRO Variable Tags Definitions Table

Tag Name	Number	1030/850 Version Equivelent
Clear The Screen	&00	---
Users Handle	&01	&01
Users Real Name	&02	---
Users Password	&03	&02
Users Address	&04	---
Users City/State	&05	&03 &04
Users Zip Code	&06	---
Users Country	&07	---
Users Phone Number	&08	&05
Users Age	&09	---
Users CPU Type	&10	---
Users Lastcall Date	&11	&06
Users Time Limit Per Call	&12	---
Users Time Limit Per Day	&13	&09
Users Minutes On Today	&14	&08
Users Last Read Message	&15	&10
Users DL Ratio	&16	---
Users Downloads	&17	&12
Users Uploads	&18	&11
Users Messages Posted	&19	---
Users Emails Sent	&20	---
Users Total Calls	&21	&14
Users Video Width	&22	---
System Hi Message	&23	&22
System Total Calls	&24	&24
System Calls Today	&25	&35
System Last Caller	&26	&20
Current Translation	&27	---
Current Date	&28	&19
Current Time	&29	&21
User Number Online	&30	---
Current Baud Rate	&31	&36
Free Time This Call	&32	---
Minutes Connected	&33	&25

Note : Tags numbers 07,13,15,16,17 18,23,26,27,28,29,30,31,32 33,34 have no direct translation to PRO.

These variable tags can be used in your help files in place of hard coded literals. Let's look at an example of a typical welcome help file and see how these variable tags are used.

This is what your help file would look like:

```
&00

        Hi &01...
        Welcome Aboard The Midnight Express!
        How Are Things In &05?
        Your Last Call Was On &11...
        You Just Missed &26...
```

And this is how the user would see it at logon:

The user's screen would clear due to the &00

```
        Hi John Doe...
        Welcome Aboard The Midnight Express!
        How Are Things In Midlothian,Va.?
        Your Last Call Was On Fri 18-Apr-88...
        You Just Missed Keith Ledbetter...
```

All the variable tags were replaced with meaningful information based on their current values. You can use these variable tags in help files, menus or text files anytime you want this variable information displayed to the user. An & with no digit ('0' - '9') next to it will display as a normal '&'. In other words, saying ***This & that*** in a menu file will display ***'This & That'***, just as it should.

The master disk contains a complete working set of help files in 40 and 80 column format for both ATASCII and ASCII translation. These should be copied to your **PRO>HELP40>** and **PRO>HELP80>** subdirectories and can be used as is.

Modifying Your StartUp.Bat File

Your Startup.Bat file should include the following SpartaDOS commands in addition to any other commands that you run during your startup.bat procedure.

```
TDLINE.COM
RS232.COM       (not needed if using an MIO)
BBSPREP.COM     (Must be the LAST file loaded that alters LoMem)
```

If your ramdisk is of sufficient size, we suggest that you create the subdirectory PRO>COMMANDS> (even if you are running with a hard drive) and copy all the command modules to the subdirectory on the ramdisk. This can be performed within the Startup.Bat if you wish.

Considering that the command modules are loaded quite a bit during board operation, placing them in the ramdisk for access will speed up the response time to the caller and reduce the wear and tear on your hard drive by only having to read the commands once from the hard drive each time the system is booted.

Autobooting the BBS from the Startup.Bat file, and thereby making the board self booting can be achieved by making the BBS.COM file the last command in the batch file. Also keep in mind that running a batch file from a batch file terminates the original batch file even though you may have had more commands to execute. You can use this to your advantage by making the board setup batch file a stand alone batch file in your PRO> subdirectory. Adding one line to the end of your Startup.Bat file to run the batch file to configure and run the BBS. Should you need to hit reset to go back to DOS to perform something, you can restart the board by typing BBS. The BBSPREP.COM file takes care of reinitializing the device handler table that the reset destroys and resetting LOMEM. By doing this, once you have loaded the necessary drivers (ie Startup.Bat), you may start and reset the board as many times as you like without having to turn the computer off and reboot the system.

Configuring The Modem

The exact dip switch settings will vary from modem to modem depending on the manufacturer of your modem. As a guideline in setting up your particular modem to run with PRD, the following criteria should be used in determining the correct DIP settings.

1. The modem should only turn on the carrier detect pin when a remote carrier is present.
2. The modem should hang up and return to command mode when the DTR goes off.
3. The modem should return messages back to the CPU in words.
4. The modem should understand its own commands.
5. The modem should be in Asynchronous mode.
6. The modem should NOT be in auto-answer mode.

Here are some example Dip Switch settings for a few of the popular modems being used today.

Hayes and SmarTeam 300/1200 Baud Modems

Switch 1 - UP	Switch 2 - UP
Switch 3 - DOWN	Switch 4 - UP
Switch 5 - DOWN	Switch 6 - UP
Switch 7 - UP	Switch 8 - DOWN

Avatex 300/1200 (Non HC version)
All Dip Switches should be UP

Avatex 300/1200 (HC version)

Switch 1 - UP	Switch 2 - UP
Switch 3 - DOWN	Switch 4 - UP
Switch 5 - DOWN	Switch 6 - UP
Switch 7 - DOWN	Switch 8 - DOWN

Most of the 2400 baud modems on the market today use internal or **'soft set'** dip switches. They require that you configure them using a communications program in terminal mode. With your modem turned on, boot your terminal program and enter terminal mode. Make sure you are set to ASCII translation, Half Duplex and set to the 2400 baud. Key the following commands terminated by a return. The modem should respond with the message 'OK'.

AT&F - resets the modem to factory settings
AT&C1 - turn the carrier detect pin on only when a remote carrier is present
AT&D3 - modem will hang up and return to command mode when the DTR pin goes off
ATS0=0 - turn off auto-answer mode
AT&W - writes the current settings to non-volatile modem memory. The modem may be turned off or even unplugged and the settings will not be destroyed.

Once these settings are made, you should never have to reset them.

*** * * * A special note concerning the Atari SX212 modem * * * ***

While PRO will run on the SX212 if you use an interface through the modem RS232 port and load the eppropiete handler, the BBS will not run through the SIO port. There are no plans convert BBS Express! PRO to run through this modem port.

*** * * * A special note to Avatex 1200 owners * * * ***

The Avatex 1200 (non-HC) is a non-standard, yet very popular modem. Unfortunately, it does not understand most "Hayes Compatible" commands. There is a special "WaitCall" module on your PRO disk that was written specifically for the Avatex 1200 modem. This file is named WTCALLAV.CMD. If you plan on running PRO on this modem, you should copy this command module to your PRO>COMMAND> subdirectory under the name WAITCALL.CMD. This special module takes the place of the standard waitcall module.

With BBS Express! PRO, you have COMPLETE control over almost every thing that a user can or can't perform. By now you may have noticed that everything under BBS Express! PRO is broken up into 32's. There are possible maximums of 32 message bases, 32 file SIG areas and 32 command levels.

Additionally, each user's record has groups of 32 on/off flags for different functions. These possible functions are broken up in the following manner.

For the message bases, there are 32 individual flags for:

- Can the user **READ** messages on this base?
- Can the user **POST** messages on this base?
- Can the user **EDIT** *ANY* message on this base? (co-sysop function)
- Can the user **DELETE** *ANY* message on this base? (co-sysop function)
- Can the user **PRINT** *ANY* message on this base? (co-sysop function)

For the file area, there are 32 individual flags for:

- Can the user **ACCESS** this SIG?
- Can the user **EDIT DESCRIPTIONS** on this SIG? (co-sysop function)
- Can the user **DELETE** *ANY* file on this SIG? (co-sysop function)

For the command security, there are also 32 individual flags to signify whether a user may execute that level of a command.

As an example, let's assume that we have a user named John Doe that has the following security level flags:

```
COMMANDS                        1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 3 3 3
          1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2

Commands  Y Y . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

MSG BASES                       1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 3 3 3
          1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2

  Read?   Y Y Y Y . . Y . Y . . . . . Y . . . . . . . . . . . . . . . . Y
  Post?   Y Y . . . . Y . . . . . . . Y . . . . . . . . . . . . . . . . Y
  Edit?   Y Y . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Delete?   Y Y . . . . . . . . . . . . . Y . . . . . . . . . . . . . . . .
 Print?   Y Y . . . . . . . . . . . . . Y . . . . . . . . . . . . . . . .

FILE SIGS                       1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 3 3 3
          1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2

Access?   Y Y Y Y . . . . . . . . . . Y . . . . . . . . . . . . . . . . .
Edt Desc?. . . . . . . . . . . . . . . Y . . . . . . . . . . . . . . . . .
Delete?   . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
```

Now... What exactly can John do? Well, as far as command levels, he can execute level 1 and 2 commands. Remember, command levels for each individual command are kept in your **SYSDATA.DAT** file, and can be changed by using the **SYSEDIT** program. This is probably the right time to explain the importance of NOT giving people '***Sysop Access***'.First, always keep the security level of the 'Sysop Command Mode' (in your SYSDATA file) at level 32. Next, **NEVER** give any of your users level 32 command access unless you are perfectly sure of what you are doing. Why? Well, the reasons are simple. A terribly upset level 32 Sysop could wipe out your ENTIRE hard drive in a matter of minutes. The 'Dos Shell' of BBS Express! PRO is about as powerful as SparteDOS itself. From within the Dos Shell, it is possible to delete every user in your userlog, delete any file on any of your drives, delete any subdirectory, etc.

As for the message bases on our BBS, John can do the following. He can can READ messages on bases 1, 2, 3, 4, 7, 9, 15 and E-mail (#32) (if a user can not read messages on a base, they will be greeted with an '***Invalid Security***' if they try to enter that base). John can POST (write) messages on message bases 1, 2, 7, 15 and E-mail. Thus, it's possible (and sometimes very convenient) to allow a user to read messages on a message base without allowing them to write messages or reply to existing messages. This is sometimes the perfect set-up for 'NEW' users.

Not long ago, John came to us with a request. You see, John is an ST user, and he asked us if we would add a new message base and file SIG area devoted to ST users. Our reply? Well, as any good Sysop would do, we said 'Sure, John...as long as YOU volunteer to maintain it! You will have to police the message bases for any vulgar messages and edit any file descriptions that you think can be improved'.

Well, John agreed to be Co-Sysop of the ST areas. So, we set up a new message base and new file SIG, both as #15. We then updated John's security levels (which are shown above). If you look at John's message base flags under base 15, you will see that he can do just about everything that is possible on a message base. He can read, post , delete, and print messages (in case he wants you to see one). But he can't edit messages. While we like John, we don't want him editing other people's messages and possibly changing something that is said (this is probably unrealistic, but used mostly for demonstration purposes).

In the file SIG's. John can only access file areas 1, 2, 3, 4 and 15. Once again, he has much more freedom in the #15 file area. There, he can also edit any file description. He does not have the ability to delete any file on that SIG, as we would prefer to do that on our own.

Now that you understand how the security levels control each user's actions, we can discuss two VERY important 'user records' in your userlog file. These records are referred to as the **NEW USER RECORD** and the **VISITOR RECORD**. These records are just like any other userlog date record, except that they are solely for your use, and no user can ever log on with them.

Their importance is that they control what happens when a NEW user logs onto your board (either as a permanent user or a visitor). Here is what BBS Express! PRO does: when a user logs onto your board as NEW, Express! will ask them if they want a permanent password. If they respond with 'Yes', the NEW USER RECORD contents will be copied into their user record. If they respond 'No', then the VISITOR RECORD contents will be copied into their user record area. So, these records become the base that their records are built upon.

Not every field in the NEW USER and VISITOR records are important. For example, any data that the user is prompted for (such as handle, name, address, etc) will overwrite what was in the new user/visitor record. The most important fields in the new/visitor records are the security levels and the time limits. Here is a list of the fields that you SHOULD update in your new user and visitor records:

```
Time limit per call
Time limit per day
Download ratio

Command Security Level
Message Base Security Level
File SIG Security Level
```

Now let's look at the various functions in the user editor. The user editor can be accessed from either the main menu (if you have it defined in your main command table) or from the Dos Shell by typing UEDITOR from the Dos Shell's command prompt or from the "Waiting For Call" screen.

This is what you see when the UEDITOR first loads:

```
                    Edit Which User?

          [U] by User number  [O] Online user
          [H] by Handle       [F] First new
          [R] by Real name    [A] Add new user

          [V] Visitor rec   [1-7] Edit mask
          [N] New User rec    [X] Exit

                    Your choice:
```

If you edit a user by one of the above options, that user record is read into memory and the following menu is displayed to you:

```
              Editing: SYSOP (#10)
               Status: Active/Validated/LOCKED

                        Edit What?

               [T] Textual data     [L] Lock user
               [U] Usage data       [O] Delete user
               [C] Command sec.   [1-7] Apply mask
               [M] Message sec.     [X] Exit
               [F] File sec.

                        Your choice:
```

If you select option T to edit textual data you will be presented with the following:

```
Editing: SYSOP (#10)
 Status: Active/Validated/LOCKED

[A]    Handle: SYSOP
[B] Real Name: Keith Ledbetter
[C]   Address: 1234 Any Street
[D]      City: Midlothian, VA
[E]  Zip Code: 23113
[F]   Country: USA
[G]     Phone: 379-4156
[H]  Computer: Atari (all)
[I]       Age: 30
[J]  Password: atari

A-J, OK, or LIST:
```

If you select option U to edit usage data you will be presented with the following:

```
Editing: SYSOP (#10)
 Status: Active/Validated/LOCKED

   [A] Time/call : 255
   [B] Time/day  : 255
   [C] Mins today: 1
   [D] Downloads : 0
   [E] Uploads   : 0
   [F] DL ratio  : 255:1
   [G] Last read : 1
   [H] Msg posted: 0
   [I] Email sent: 0
   [J] # of calls: 1
   [K] Last call : Mon  18-Apr-88

A-K, OK, or LIST:
```

If you select option C to edit command levels you will be presented with the following:

```
Editing: SYSOP (#10)
 Status: Active/Validated/LOCKED

       Which command levels can this
             user execute?

           (Y, N, or Return)

                1    1    2    2    3
      ----5----0----5----0----5----0--
 Now: YYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY
 New:
```

If you select option M to edit message base security data you will be presented with the following:

```
Editing: SYSOP (#10)
 Status: Active/Validated/LOCKED

     What message base actions can
         this user perform?

                1    1    2    2    3
          ----S----0----S----0----S----0--
A] Rd  ŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷ
B] Wr  ŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷ
C] Ed  ŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷ
D] De  ŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷ
E] Pr  ŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷ

A-E, OK, or LIST:
```

If you select option F to edit file SIG security data you will be presented with the following:

```
Editing: SYSOP (#10)
 Status: Active/Validated/LOCKED

     What file SIG actions can
         this user perform?

                1    1    2    2    3
          ----S----0----S----0----S----0--
A] Rd  ŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷ
B] Ed  ŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷ
C] De  ŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷŷ

A-C, OK, or LIST:
```

Message Bases

The message bases are accessible through either the = command to go to any individual message base or through the Q command to perform a Quickscan of any new messages on all the bases since the user's last call.

The command prompt in the message base processor contains 4 pieces of information. Here are a few sample message base prompts.

```
(1\50+) General:
(50\50+) General:
(0\1\50) General:
```

The first perameter specifies either the read direction that you are currently in ('+' forward or '-' backward) or '0' to signify that you are in QuickScan mode. The next parameter specifies the current message number within the message base that you are on. This is the message number that any of the base commands will act upon. The <Return> key always takes you to the next message number.The next parameter specifies the number of messages currently active in this message base.The last perameter specifies the name of the message base you are currently in.

Access to a message base is determined by the user's message base security flags. If the READ flag is set for a base, they can read messages on that base. If the POST flag is set, they can also post messages on that base. A user can always edit or delete a message that they have posted, but would require the appropriate security flag be turned on to perform those functions on a message written by someone else.

Printing a message to the local printer requires that the PRINT security flag for that message base be set ON. This option is available for use by using the H key in the message base processor. This function does not appear on the menu.

Should the need arise from time to time, the sysop may change the name of the message base by using the Z key. You will then be prompted for a new message base name. This option is only functional if the command level 32 security flag is turned on.

Download File Sigs

Each of the possible 32 download file sig areas is accessible to the user if their file sig security bit has been turned on by the sysop. If a user can get into the file area, then they will be able to see ALL files in that area. The security is at the FILE AREA level. You either can or can't get to the area. If you can, you can see everything.

Listed below are the 7 functions that can be performed while at the file area command prompt.

[B] Browse files with descriptions
[C] Catalog files, 15 per page
[N] New files since your last call
[U] Upload a new file
[/] Go to the next file area
[=] Go to another file area
[X] Exit to the main menu

Option [B] Browse files with descriptions

If the user selects option B, they will be presented with one file at a time for viewing. Like this:

FILENAME COM 5200 1-31-87 2:09p

this is the description for filename.com

[D]ownload [R]ead [E]dit Desc
[A]gain [C]ontinue [T]reshcan
[Q]uit

The user may select any of these options, except E and T. These two options will only function if the user's security bit for editing descriptions and deleting files for this file sig has been turned on.

If the user selects the download option, they will be prompted with:

S)tandard C)RC Xmodem or Y)modem?

Once the user makes a download protocal selection, the file transfer begins.

Option [C] Catalog files, 15 per page

If the user selects option C, they will be presented with up to 15 files at a time for viewing. Like this:

	Filename		Size	Date
[A]	FILE1	COM	5200	1-31-87
[B]	FILE2	COM	5300	1-31-87
[C]	FILE3	COM	5400	1-31-87
[D]	FILE4	COM	5500	1-31-87

[D]ownload [R]ead [Q]uit [C]ont:

If the user selects the download option, they will be prompted with:

Download which file (A-D)?

The user makes their file selection for downloading by letter and will be prompted again with:

S)tandard C)RC Xmodem or Y)modem?

Once the user makes a download protocal selection, the file transfer begins.

New Files Validation

When a user uploads a file to your system, it is always sent to the PRO>UPLOAD> subdirectory. The file remains there, inaccessible to the user, until you validate these files.

To validate new uploads, go into the Dos Shell and execute the command module **NEWFILES**. **NEWFILES** will scan the upload directory and present you with each uploaded file one at a time like this:

```
FILENAME COM   5200  1-31-87  2:09p

this is the description for filename.com

 [V]alidate  [R]ead File  [E]dit Desc
 [D]elete    [N]ext File  [C]hange Name
 [Q]uit

 [Function]=>
```

Validate Option - will allow you to validate a file. You will then be prompted with: Move to which file area (0=List)?

You may enter a 0 to see a list of your download file areas or specify a file area to move the uploaded file. The NEWFILES module will scan the file area you specified, looking for an available subdirectory to move the file. It will start looking in the F001 subdirectory. If there aren't 127 files in that subdirectory, the file will be moved there, If full, **NEWFILES** will continue looking thru F002, F003 etc. until it finds a subdirectory with room to move the file. Once an available subdirectory is located, the file and it's description is copied into the subdirectory. The original file and description is deleted from the upload subdirectory. The next upload file is displayed and the process repeats itself until all the files in the upload directory have been presented. Once all uploads have been displayed, you are returned to the Dos Shell command prompt.

Read File Option - will display the file to the screen (and modem if logged on remotely) and then redisplay the file entry.

Edit Desc Option - will allow you to edit the current file description or create a new one if none exists.

Delete Option - will allow you to delete the file without validating it. Both the filename and file description will be deleted.

Next File Option - will allow you to continue to the next upload file without disturbing the current file presented.

Change Name Option - will allow you to rename the file before validating it. Both the filename and file description are renamed.

Quit Option - will allow you to abort new files validation prior to viewing all new uploads.

The Dos Shell is an environment where board maintenance and most of the major SpartaDos functions are performed. The board comes configured to you with this function accessible from the command prompt by simply pressing the $. From the "Waiting For Call" screen press option 8. There are currently over 35 commands available in the Dos Shell. A help menu is available while in the Dos Shell. Press ?. As new commands become available, it's a simple matter to copy the command into the PRO>COMMAND> subdirectory. The command is automatically available to you from the Dos Shell. You can add commands (.CMD files) to the command subdirectory up to the subdirectory limit of 127. The best way to get a feel for what the Dos Shell can do is to use it once you have the board running.

The commands function as they would from SpartaDos, with a few new ones, like COUNT and SHUTDOWN. COUNT simply counts the files and subdirectories in the current path and displays the statistics back to you. (Handy for knowing if a subdirectory is getting close to filling up.) SHUTDOWN, if executed, will affectively lock the BBS program and will keep it from responding to incoming calls. It does not turn the power off or return the system to the DOS prompt, but rather disables the BBS from processing incoming calls until a key is hit from the local keyboard. Once you have shutdown the system remotely, you cannot re-enable it remotely. That can only be done from the local keyboard.

A safety feature of the Dos Shell is if you enter it locally while a user is online and allow the user to see what you are doing, they will not be able to execute any commands because the Shell will not accept a return from the modem. They would be able to key in commands but when they hit return, the Shell would tell them that commands can only be executed locally. It allows them to key in a command while you locally execute a return for them. You can temporarily set them up with command level 32 to allow them to perform functions in the Shell. Don't forget to turn their command level 32 off after the call or they could enter the Shell on their next call and perform functions unattended. This feature was designed to stop a user from attempting to send a DELETE *.* macro across the modem before you could react to it. This only occurs if the Dos Shell was invoked locally. If you or a co-sysop call in and invoke the Dos Shell remotely, all functions are enabled remotely as if you were at the local keyboard.

The Dos Shell's "command line parser" is extremely intelligent. For example, here are various ways you could enter the same command:

```
COPY D1:>PRO>COMMANDS>*.* D2:>PRO>COMMANDS>*.*
COPY D1:>PRO>COM*>*.* D2:>PRO>COMMANDS>
COPY D1:>PRO>COMMANDS> D2:>PRO>COM*>
```

BBS Express! Professional
Dos Shell Menu
Orion Micro Systams (1988)

[ ] Denotas Optional Parameter

Directory Commands

```
Dx:                - Change Drive
Dir   [Dx:]        - Long Dir.
Dirs  [Dx:]        - Short Dir.
PDir  [Dx:]        - Print Long Dir
PDirs [Dx:]        - Print Short Dir
Credir Path        - Craata Dir.
Deldir Path        - Delate Dir.
CWD    Path        - Change Dir.
Count [Path]       - Count Filas
```

File Commands

```
Erasa  Dx:Fn       - Delete Fila
Deleta Dx:Fn       - Delate File
Raname Dx:Fn       - Ranama Fila
Type   Dx:Fn       - View Fila
Viaw   Dx:Fn       - Viaw File
Copy   Src Dast    - Copy Fila
Copy/N Src Dest    - Copy File
                     (auto overwrita axisting file)
Print  Dx:Fn       - Print Fila
Lock   Dx:Fn       - Lock Fila
UnLock Dx:Fn       - Unlock File
```

Disk Commands

```
ChkDsk   [Dx:]  - Disk Statistics
Protect   Dx:   - Protect Disk
Unprotect Dx:   - Unprotect Disk
```

Maint. Commands

```
Ueditor          - Usar Editor
Editfile [Dx:Fn]- File Editor
NawFilas         - Validate Uploads
Viawavnt         - Viaw Event Status
ULPrint          - Print ULog Utility
ULBackup         - BackUp Usarlog
```

Time Commands

```
Settima          - Sat Tima
Satdate          - Sat Data
Showtima         - Display Time
Showdate         - Display Data
```

Misc.Commands

```
Chat [On/Off]    - Turn Chat On/Off
                   Or Display
                   Currant Setting
ShutDown         - Daactivate BBS
Help or ?        - Help Manu
Exit or X        - Exit Sysop Mode
```

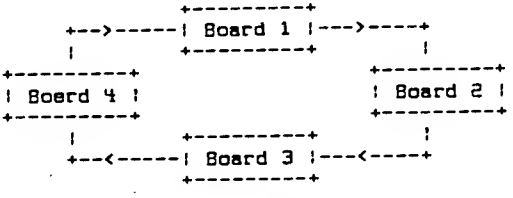
NOTE: From the DOS shell, any extarnal command may be ran by simply keying in its name (ie: FILESTAT or UEDITOR).

ExpressNet Networking

The ExpressNET networking feature of PRO is an automatic message networking facility for exchanging messages with another BBS Express! PRO system. This can be a second board you run, or a PRO board across town or across the country.

Operationally (from the sysop's point of view) it is a very simple process.

Here is a pictorial of a sample network setup.



As you can see, this sample network contains 4 boards. The arrows show the direction the messages would flow. The key thing to remember when networking is ***'the board initiating the call receives the messages'***. In order to achieve this flow, board 2 would call board 1 to receive new messages. Board 3 calls board 2. Board 4 calls board 3. And to complete the loop, board 1 calls board 4.

In a 2 board network, board 1 would call board 2 to receive messages and then board 2 would call board 1 to receive messages. This was done this way, so that 1 board would not have to bear all the cost of long distance charges. After all, why should you pay the LD costs for someone else to get messages to post on their board. You make the call, you get the messages, simple as that!

Networking with another PRO board is not something that ***'just happens'***. You and the sysop you will be networking with must both agree on the bases you want transferred and set up each side accordingly. You must set up a user id for the other sysop's use when calling your board as a network caller, and he must set one up for you to use when you call his board thru ExpressNET. Once you have this information, you are ready to set up the parameters necessary to network with the other board.

There are 8 parts to the ExpressNET subsystem. They are:

ECHONET.DAT - contains the node list of boards to build outgoing message packets. This file can be editted with any word processor. It contains one line for each board entry and looks like this:

```
1  25  PRO Support Board
^  ^   ^
|  |   |
|  |   Comments (Optional)
|  |
|  The nodes user number
|
The node number of board for which
you are building the message packet
```

Each of these fields are separated by 1 space.

NETEDIT.DAT - contains the network node list of boards that you are calling to receive message packets.

INCOMING.DAT - this is the data file which contains the incoming message packet containing messages that will be posted on your board by NETUPDT. When NETUPDT posts the messages to your bases, it automatically deletes this dataset.

NETEDIT.CMD - edits the network node list

NETPREP.CMD - preps the outgoing network message packet for another node

NETCALL.CMD - performs the outgoing call to connect to another BBS

NETUPDT.CMD - processes the incoming network message packet you received from another system

NETHOST.CMD - processes incoming network calls

Let's discuss each .CMD command in detail.

NETEDIT.CMD - this module runs from the Dos Shell. It allows you to enter up to 50 different nodes you wish to network with (ie receive incoming messages). This is the only module that you will run outside of the event scheduler. From the Dos Shell, run the program by typing NETEDIT. The following screen will appear:

```
   [ExpressNet OutCall Maintenance]
         ExpressNet Entry #1
 [1] Baud Rate.......  300
 [2] Phone Number:
 [3] Incoming Bases
       ----+----1----+----2----+----3-
       OOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
       OOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
 [4] Last Good Call.. 00/00/00
 [5] Max Retries..... 10
 [6] Num Retries..... 0
 [7] User Number..... 0
 [8] User Pword......

  [#]To Edit  [N]ext  [D]elete  [Q]uit

 [Function]=>
```

- enter the number of the parameter you want to change. You will be prompted as follows:

Function 1
Toggles the baud rate and redisplays the screen

Function 2
New Phone Number [Max 43 Char.]
=>

Function 3
Edit Which Base Number? => 20
Enter the base you went to change. This represents the message base number you will be receiving on the other system.

New Base Number? => 05
This is the base number on your system where the messages from the above option will be posted. Using the numbers in the example, 20 and 05, this translates to 'I want to receive base 20 on this system and I want the messages posted on my board in base 5'.

Function 5
New Max Retries [Max 255]=> 100
The maximum number of times to retry connecting to the board node before giving up.

Function 6
Set Num Retries => 30
The number of retries before going on to next node entry.

Function 7
New User Number =>
This is the user number on the other system that you use to logon as a network caller.

Function 8
New User Password [Max 15 Char.]
=>
This is the password on the other system that you use to logon as a network caller.

[N]ext - takes you to the next node entry

[D]elete - will delete and reset the current displayed node entry

[Q]uit - returns you to the Dos Shell. If any editting was performed while NETEDIT ran, the changes are saved back to NETEDIT.DAT before returning control to Dos Shell.

NETPREP.CMD - this module runs from the event scheduler. NETPREP reads the ECHONET.DAT file and builds the "message packets" for each of the node numbers that you have specified as being able to receive messages from your board. The NETPREP command should be placed in the event scheduler to be run once a day. NETPREP simply reads the ECHONET.DAT file and creates a packet (or file) for each node in the ECHONET file. The "user number" specified in the ECHONET.DAT file is actually used to read the userlog record so that NETPREP can determine which messages are "new" for each node. The user record will be updated and rewritten after NETPREP runs. The message packet for each node is placed in the PRO>NET> subdirectory using the following data set naming convention:

X-nn.DAT
^
|
This number will be the NODE number of the packet receiver. So, if this packet was built for node number 1, the dataset name would be X-1.Dat. The node number is derived from the first parameter on each line of the ECHONET.DAT file.

NETCALL.CMD - this module runs from the event scheduler. When this event runs, it reads the NETEDIT.DAT file and starts calling each board in the list until it connects with the board or has tried to call the maximum retries specified. Once connected, the boards handshake and start the message packet transfer if a packet exists. Once the packet is received, the connection is terminated and the receiving board passes control to the NETUPDT module to process the message packet which has been saved as INCOMING.DAT in the network subdirectory.

NETUPDT.CMD - this module is the opposite of NETPREP; it applies new packets that you have received to your message bases. NETUPDT is invoked automatically by the NETCALL.CMD after each message packet is downloaded from each board that you are calling. Once the packet has been processed, INCOMING.DAT is deleted and control is returned to NETCALL to continue the calling out process if additional boards still need to be called.

Steps Required To ** RECEIVE ** network message packets:

1. Run NETEDIT.CMD from the Dos Shell and add the node info. Remember, you must have a valid logon ID and password to the board that you will be receiving these messages from.

2. Add NETCALL.CMD as an event to the Event Scheduler. Once netcall has connected to the board and received the message packet, it will hang up and run the NETUPDT module to process the packet before continuing with the next entry in in the list. Once all the entries have been processed, control is returned to the waiting for call module.

Steps Required To ** SEND ** network message packets:

1. Add the node entry information to the ECHONET.DAT file for the node that will be calling your board to receive messages so the message packet for that node will be built each day.

2. You must add a new userlog record for the node that will be calling your board. You must tell the sysop of the calling board both his user number and password.

   NOTE: Even if the sysop whose board is going to call your board already has a user record on your board, you MUST create a new user record for his BBS.

   After creating this new user record, you must edit the "message base read" security levels for this new record. NETPREP will not echo messages from a base that this node does not have "read access" to. In other words, you can set up a node to only be able to receive messages from bases 1, 3, 7 and 9.

3. Add NETPREP.CMD as an event to the Event Scheduler if it is not currently in the event scheduler. NETPREP's job is to build the message packet for each node you will be networking will. When setting up the scheduler, make sure that you have scheduled this command to run before you expect the first incoming network call. If a network call came in and this function had not run, no packet would be waiting for that node.

It is perfectly acceptable to run the NETPREP every day to build message packets for your networking node's, but only have the nodes call in for messages every other day or even once a week. If NETPREP runs and determines that a dataset already exists for a node, it simply appends the additional messages to the packet. Once the node calls in to receive a waiting message packet, the packet will be deleted automatically upon a successful transfer with the receivar.

Should you desire, you may also run the NETPREP module manually from the Dos Shell. Why? Well, suppose you just started networking with a new node and wanted to get the initial transfer done to make sure everything was working correctly before setting it up in AUTO mode. You could manually run NETPREP, and have the receiver call in to receive (either automatically or using the XMODEM command from the Dos Shell) their message packet.

Event Scheduler

The Event Scheduler allows programs requiring no user input to process autometically at predetermined time intervals. The events themselves, as well as the time intervals, are set up using Option B in the SysEditor. PRO allows you to configure up to 30 of these events to run, based on the type of event you set it up as. As an example, the system automatically configured the WHOMAINT event to run after every call. You will recall that WHOMAINT is the module that records the caller to the last 50 callers log. On the master disk are 3 event modules excluding the NETWORK modules.

They are :

ULBACKUP.CMD - backs up your userlog

ULPURGE.CMD - deletes users based on lastcall date

WHOMAINT.CMD - records user to the last 50 callers log when they log off the system. This module was automatically set up for you when you initielized a new Sysdate.Dat file.

Each of these modules performs a function that does not require any input from the sysop to carry out its function. While most of these commands could be executed from the Dos Shell by the sysop, the event scheduler removes the burden of remembering to perform these functions. Set them up and forget about them. Let the event scheduler keep track of when these modules should be run.

Normally, after each caller hangs up, as part of the reset procedure, PRO will start the event scheduler. The event scheduler will scan the event list, perform each function if it's time, and finally return control back to PRO. If the board has been idle, Pro will automatically start the event scheduler at the top of each hour, so events will not be missed due to this idle time period. This will occur frequently in the early morning hours when callers are at a low point. This is ideally when you would want to schedule backups, userlog purge or packet processing, if you are using the networking facility.

The scheduling of events is normally a 'set and forget' operation. This is the reason we included the event scheduler in the Syseditor. There is currently no provision for modifying the event schedule while the board is running. To do this, you have to reset the board and run the SysEditor, then rerun the board. We will be writing an online scheduler so this will not be necessary. This module will be placed on the support boards for you to download.

Library Text Menus

BBS Express! PRO incorporates a text menu structure which permits the sysop to build selection menus for viewing text files, executing commands or even building a text based adventure game.

The structure of these text menus is broken down into 5 sections.

They are:
1. Command Line
2. Prompt Line
3. User Option Selections
4. END Statement
5. Text Display

Here's a sample Text-Menu file:

```
Text-Menu Level 20 NOABORT Return
View Which Help File? -->
MAIN D1:PRO>TEXT>MAINHELP.TXT
BASE D1:PRO>TEXT>BASEHELP.TXT
EDIT D1:PRO>TEXT>EDITHELP.TXT
C/R  Exit
END
&00
```

```
                Board Help
                ----------
    [Main]   Help On The Main Commands
    [Base]   Help On The Message Base Commands
    [Edit]   Help On The Message Editor Commands
    <Return> To Exit
```

Here's a sample Command-Menu file:

```
Command-Menu Level 20
Play Which Game? -->
Game1 Cards
Game2 Dungeon
Game3 Hangman
Exit  Exit
C/R   Score
END
&00
```

```
          Online Games

    [Game1]  Play Cards
    [Game2]  Play Dungeon
    [Game3]  Play Hangmen
    [Exit]   Return To Command Prompt
    <Return> To See The ScoreBoard
```

Let's discuss each section in detail.

[1] The Command Line - this line tells PRO how to handle this particular text menu. If more than one parameter is used on this line, they should each be separated by a space. The parameters available for use on this line are:

COMMAND-MENU — this option lets PRO know that the selection options are executable (.CMD) files. PRO will attempt to load and execute the file. Once the command executes, the user is returned to the command prompt.

TEXT-MENU — this option lets PRO know that the selection options are text files. PRO will display the selected file to the user and on the local display screen.

RETURN — this option tells PRO to return to this menu when finished displaying a file. Return only works with the text-menu parameter and is only one level deep. So if you set up a text menu with a return option, and it executes another menu with a return in it, the user would return to the second menu. The return to the first menu was broken by the second menu. Using the same first menu, if a second menu is invoked that does not have a return on its command line, then the return would be to the first menu.

LEVEL nn — this option tells PRO to only execute this menu if the user's security level is set ON. 'nn' is the command level required to execute this menu. If the user's security does not permit them to execute the menu, they would receive an 'Insufficent Authority' message and would exit back to the command prompt.

QUIET nn — this option functions like the Level nn except that if the user does not have the security level required to execute the menu, they would be returned to the command prompt without receiving any message. This is useful if, let's say, you wanted to alert club members to the next meeting date, but didn't want non-club members to know the menu was attempted.

NOABORT — this option tells PRO to ignore any abort key the user may hit and continue displaying the file. This is useful if you want the user to read your system news EVERY time or have paid advertisements that you don't want the user to be able to abort.

[2] The Prompt Line - this line allows you to set up the prompt that is displayed to the user after the menu display text is presented to the user. This allows greater flexibility for requesting user input depending on the purpose of your menu. Some example prompts would be:

```
Enter Your Selection ==>

[N]orth [S]outh [E]ast [W]est  Which Way? =>
```

[3] The User Option Selection - this section of the menu consists of the actual filenames for each of the selections available in the menu. Each selection in the menu would have a line in this section to

1. Define the selection mask AND
2. the filename associated with this selection

For instance, let's use our sample menu which is a menu containing user help text files for the board. In this section of the menu, we would have 4 entries:

```
MAIN 01:PRO>TEXT>MAINHELP.
BASE 01:PRO>TEXT>BASEHELP.TXT
EDIT 01:PRO>TEXT>EDITHELP.TXT
C/R  Exit
```

Looking at the first line, if the user keys the word MAIN, PRO will display the text file 01:PRO>TEXT>MAINHELP.TXT. If the user keys EDIT, PRO will display the text file 01:PRO>TEXT>EDITHELP.TXT. The C/R is a special option which allows you to define the action which will be taken if the user hits the return key. In this case, we have defined the return to be EXIT, but it can be a text file or even another menu. Some type of exit must always be defined or the user would never be able to get out the the menu. In the sample menus above, we have shown you 2 ways to code in an exit. Either using the C/R as an exit or explicitly coding the word EXIT as an option.

When building a Text-Menu, the FULL pathname must be specified including the drive, subdirectory and filename. If you are building a Command-Menu, only the 8 character filename is specified. PRO will always build the full pathname by adding the .CMD to the filename you specified and will always go to the PRO>COMMANDS> subdirectory to find the file to execute.

You may also pass parameters to a command from a Command-Menu (if the command can take parameters). For instance:

```
Command-Menu Level 32
Download Which File? ==>
Call Xmodem S 01:PRO>LOG>Call.Log
ULog Xmodem S 01:PRO>Userlog>Userlog.Rpt
Exit  Exit
END
&00
          Download Board Reports
            Co-Sysop's Only

        [Call]  Download Call Log
        [Ulog]  Download Userlog Report
        [Exit]  Exit This Menu
```

In the above example, the Xmodem command requires 2 parameters be passed to it. The first parameter 'S' tells xmodem to send a file and the second parameter is the filename to send.

[4] END - this parameter terminates the structured menu information from the text display which follows. Everything after this statement to the end of the menu file is displayed to the user. This END parameter MUST be present in the menu or the menu will not work correctly.

[5] Text Display - this is the portion of the menu which is displayed to the user. Variable tags may be used in this section of the menu. In our sample, we used the &00 variable tag to clear the screen before displaying the menu to the user.

Main Menu Commands

Below are the commands available to the user at the main command prompt. These are the commends set up by default. You may add or delete commends as you wish. Refer to the section on the Syseditor for the proper procedure for adding main commands. Note that the Ushell function is provided only if you would like your users to see what can be performed in the Dos Shell. The only real change a user could make using the User Dos Shell would be to turn chat OFF and ON. Any other function which could do demage has been turned off. Should you decide that you don't want your users to see the DEMO, this function may be removed from the menu and main command list.

BBS Express! Professional
Main Menu
(Upload Your Files Under [B]rowse!)

```
**************************************
* A ASCII/ATASCII  ! B Browse Files   *
* C Cell Sysop     ! D D/L Locator    *
* F Feedback Area  ! G Goodbye (OFF)  *
* I System InfoNET ! L Library Files  *
* N System News    ! O Ordering Form  *
* P Parameter Edit ! R Read *E-Mail*  *
* S Send *E-Mail*  ! U User Search    *
* W Last 50 Calls  ! Y Your Own Stats *
* - GoTo Any Base  ! * Msg Base List  *
* Q Quickscan      ! @ Edit scan list *
* # Shell >Demo<   ! ! SIG Statistics *
**************************************
*     & - On-Line Upload Validator    *
*     % - On-Line User Editor         *
*     $ - SysOp-Only DOS Shell        *
**************************************
```

Message Base Commands

The following is a list of commands available to the user when they are in a message base.

<Return> reads the next message

```
[A] Read the current message again  [Q] Quit reading current thread
[B] Set read direction to backward  [R] Reply to the current message
[C] Continue keyword search         [S] See replies to current message
[D] Delete the current message      [T] See thread of current message
[E] Edit the current message        [U] Unlock the current message
[F] Set read direction to forward   [V] Verbose mode toggle (on/off)
[G] Goto a certain message number   [X] Exit back to the main menu
[J] Goto a certain message number   [*] List of active message bases
[K] Search for a keyword            [@] Add/remove base from scan list
[L] Lock the current message        [+] Read ahead one message
[M] Message base statistics         [-] Read back one message
[N] Position at first new message   [>] Read ahead one message
[P] Post a new message              [<] Read back one message
```

If verbose is OFF, hitting 'A' will read the message

Two additional commands are available to the sysop:

[H] HardCopy Print [Z] Change name of message base

Message Editor Commands

The following is a list of commands availeble to tha user in tha message editor. Eech of these commends is preceadad by a '/' in the first position of a line.

[A] Abort this messege end exit
[B] Begin this message over agein
[C] Display a columner heading
[E] Edit an individuel line
[F] Formetted listing of messege
[G] Toggle grephics mode on / off
[I] Insert a new line
[L] List the messege
[N] List the message with numbers
[R] Repeat the last input line
[S] Save this message and exit
[U] Unformatted Seve and exit
[W] Toggle word wrap on and off
[/] Clear the screen

Valid Control Keys

^L - Peste Letter from seved line
^N - Inserts your Neme (hendle)
^W - Peste Word from saved line
^R - Inserts your Real neme

File SIG Commands

The following is a list of commends eveilebla to the user when they ere in a file sig eree.

[B] Browse files with descriptions
[C] Cetelog files, 15 per pege
[N] New files since your last cell
[U] Upload a new file
[/] Go to the next file eree
[-] Go to enother file eree
[X] Exit to the main menu

Adding System Commands

System commends cen be added et eny time by simply copying the .CMD file into your commend subdirectory. By doing this, they are immediately available to the sysop from the Dos Shell. If it is a command file that will be used by your boerd users, you will need to defina the command in the sysdete file by using the syseditor end editing the main commands. Refer to the section on the Syseditor for the proper procadure for adding main commends.

Starting The Board

Ok...now that we have everything configured, we're ready to run the board. But first, a checklist.

1. Subdirectories created
2. Sysdata.Dat configured (must be in path you boot the BBS from)
3. Userlog created
4. Message Bases created
5. File Sig directories created
6. Help files created and/or edited
7. Modem configured
8. IDLINE installed (manually or from the Startup.Bat)
9. RS232 installed (manually or from the Startup.Bat)
10. BBSPREP installed (manually or from the Startup.Bat)

Ok, everything checks out... now we'll run the BBS.COM program from the PRD> directory.

If this is the first time you have run the board, several things must be done before you're ready for the first caller. First, you need to run the user editor (Option 6) so you can edit your ID (userID #10) in the userlog. Change the textual data to your liking and save the changes. Also edit the co-sysop user ID #11, even if you don't plan on having a co-sysop. The board treats ID's #10 and #11 differently than other ID's, so these must never be used by regular users.

User ID's 1 through 9 are reserved by the system. They are:
ID #1 is the 'Visitor record'
ID #2 is the 'New User record'
Id's 3 thru 9 are sysop predefined validation masks

Now, you will need to edit the Visitor record and the New User record to set up the following:

time limits
download ratios
command security levels
message base security levels
file sig security levels

When a new user calls and asks for a permanent ID, these are the initial values that will be transferred to their ID until you validate them. The rest of the data is obtained from the user when they apply for an ID.

We recommend that VISITORS not be allowed to post messages. Just let them read messages and look around.

The ID's 3 thru 9 are special validation mask ID's (1-7) that the sysop can set up to aid in the validation of new users. Many of you currently running boards tend to validate new users in one of a handful of ways, depending on the user information supplied. You can predefine up to 7 of these validation masks so that when you are validating a new user, you can apply one of these validation masks to that user's ID. By doing this, all the command, message and file security levels along with the time limits and download ratio set in that particular validation mask are transposed to the user record that you are currently editing.

Rather than individually setting all the security flags by hand, you can APPLY a generic security level for this user by pressing just one key.

You will notice when the BBS starts, the 6 line Status Window at the top of the screen. This is the normal configuration. From time to time you may want or need to see more of the screen without all the status lines. By holding down the SHIFT CONTROL keys and pressing '1', '2', '3' or '4', you can change the number of lines used for the status window.

SHIFT CONTROL 1 - displays the normal 6 line status window
SHIFT CONTROL 2 - displays a 4 line status window
SHIFT CONTROL 3 - displays a 2 line status window
SHIFT CONTROL 4 - no status window

Sysop Options From Waiting For Call

There are 8 options available to the sysop while the board is waiting for a call. They are:

1 Quick Entry #1
2 Quick Entry #2
3 Logon By Handle
4 Logon By Name
5 Normal Logon
6 User Editor
7 Chat Mode
8 DOS Shell

1. **Quick Entry #1** - this logon option allows the sysop (User #10) to quick logon directly to the command prompt. Logon using this option sets the last caller to 'A Visitor'.

2. **Quick Entry #2** - this logon option allows a co-sysop (user #11) to quick logon directly to the command prompt. Logon using this option sets the last caller to 'A Visitor'.

3. **Logon By Handle** - this logon option allows logon directly to the command prompt as a user after supplying the users handle. Logon using this option updates the last caller.

4. **Logon By Name** - this logon option allows logon directly to the command prompt as a user after supplying the users real name. Logon using this option updates the last caller.

5. **Normal Logon** - this option allows logon as if you were connected remotely. All the normal logon files are displayed and all prompts for logon data are made and validated.

6. **User Editor** - this option allows you to access the user editor without the need to logon to the system.

7. **Chat Mode** - this option toggles the chat mode ON and OFF. Chat mode status is visible in the BBS status window.

8. **DOS Shell** - this option allows you to access the DOS Shell without the need to logon to the system.

Entering Chat Mode

While a caller is online, you may enter chat mode by pressing the escape key once. You are then placed in a direct chat mode with the user. Typing from the local keyboard will immediately be output to the modem as you type. A unique feature of PRO's chat mode is if you press the escape key a second time, a type ahead buffer will appear in the bottom 2 status lines. You can now type a message to the user while they are typing to you, but your message will not be sent out until you press the enter key. Once you press the enter key, you are immediately back in real time chat mode. Pressing escape again will turn on the type ahead buffer again for your next message. This feature can come in handy if you are in chat mode with a slow typist and you know the answer you want to send before the caller has even finished asking the question. Just press escape again, key your response and wait for them to finish typing before pressing the enter key to send your response. Your users will be amazed at how fast a typist you are!

To EXIT chat mode, simply press ESCape twice.

The System Clock

The BBS system clock is actually using the SpartaDOS software clock which is normally set manually or automatically set if you have the R-Time 8 clock cartridge. In either case, BBS Express! PRO requires that TDLINE.COM handler be installed before running the BBS. An error will occur and PRO will refuse to load if the TDLINE handler is not installed.

The Call Log

The system call log is stored in the PRO>LOG> subdirectory using the name CALL.LOG. Each caller to the BBS is logged into this dataset. Call.Log does not have to be predefined. If PRO can not find it, the dataset will automatically be created.

The Call.Log may be disabled if you choose, by setting the LOG drive number to 0 using the SysEditor.

User Editable Parameters

When a user presses the P key to edit their user settable parameters, they are presented with the following:

```
[A] Real Name: John Doe
[B]    Handle: JD
[C]   Address: 1234 Any Street
[D]      City: Midlothian, VA
[E]  Zip Code: 23113
[F]   Country: USA
[G]     Phone: 379-4156
[H]  Computer: Atari (all)
[I]       Age: 30
[J]  Password: atari
[K]  V. Width: 40

[L] Auto-read Email at logon: No
[M] Clear screen after msg  : Yes
[N] "Hotkey" 1-key commands : Yes
[O] Non-stop quickscan mode : No
[P] Message view page length: 0

Enter letter to change, OK when done,
or <return> to list:
```

Any of these settings may be set by the user (except changing their name/handle) and are stored in the users record. PRO uses these settings when making decisions on how to present the data to the user.

Logging A User Off The System

At any time a caller is online, you may hang them up instantly by pressing the **START SELECT OPTION** keys simultaneously. This will terminate the call and reset the board back to the waiting for call screen.

Converting 850/1030 Express! Userlog To PRO

We had originally intended to provide a conversion program for owners of the 850/1030 original versions of BBS Express! for converting their existing userlog to the PRO format. Halfway through the code, we realized that only the handle, password, city and state could be converted to the new format. This does not come close to the information that is now stored with each userlog record. Therefore, we concluded that the sysop could spend weeks trying to hand key all the data required, assuming they had it in the first place. We scrapped the plan in the name of progress.

In the long run, your userlog will provide you with more information and be more accurate if you ask your users to log on NEW.

Printing And Purging The User Log

There are 2 .CMD modules available on the disk for the purpose of printing and purging the userlog. They are: ULPRINT.CMD and ULPURGE.CMD

ULPRINT.CMD is a command module that can only be run from the Dos Shell by typing ULPRINT. It has 4 options available:

1. **Print Userlog To Printer** - will print the userlog (4 users per page) to the printer.

2. **Print Userlog To Disk File** - will write the userlog report to a disk file instead of the printer. You will be prompted for a FULL filename at the time you execute this function. This can be useful for remote sysops, they can download the created file and copy it to their printer or for the sysop to print the userlog on another system that has a printer connected. The output from this option is the same as in option 1 except it goes to a disk file rather than the printer.

3. **Print Only New Users** - will print only the users in the userlog who currently have a status of 'New User'. This can be useful for printing new users since the last time you validated users, BEFORE validating them. Output from this option is directed to the printer.

4. **View Userlog Statistics** - will scan the userlog and display to the screen (locally and remotely) the current userlog statistics as follows:

```
System Reserved : x
  Active Users : xxxxx
  Locked Users : xxxxx
    New Users : xxxxx
 Deleted Users : xxxxx
   Total Users : xxxxx
```

   This can be useful for determining the status of your userlog and to see if new users have called since your last validation or if the userlog is approaching its maximum allocation.

ULPURGE.CMD is a command module that can be run from the Dos Shell by typing ULPURGE, or it may be set up as event to be run by the Event Scheduler.

When ULPURGE runs, it looks for a file called ULPURGE.DAT in the PRO>DATA> subdirectory. This file is a text file containing 1 line. On that line is a number between 1 and 365 which represents the number of days back from the current date to start purging.

Let's say you want to delete users who have not called your board in the last 90 days. Create the file called ULPURGE.DAT in the PRO>DATA> subdirectory. On the first line, key in 90, followed by a return, and save the file. Now when ULPURGE.CMD runs, it will read the userlog and mark and use 90 as its days to purge value. It will read the userlog and mark any user who has not called in the last 90 days as deleted. ULPURGE

will bypass any user record you have locked regardless of the last call date, so locked users will never be deleted.

The important thing to remember here is that once you establish your purge days, you never have to change. **ULPURGE** will always calculate the purge date based on the current date and your purge days criteria. While you can run this program as often as every call, we suggest you use it as an event and set it up to run once a week.

Other Utility Programs

ULBACKUP.CMD is a command module that can be run from the Dos Shell by typing **ULBACKUP** while in the Dos Shell or it may be set up as event to be run by the Event Scheduler. When **ULBACKUP** runs, it looks for a file called **ULBACKUP.DAT** in the **PRO>DATA>** subdirectory. This file is a text file containing 1 line. On that line is the FULL filename to be used as the destination filename for backing up the userlog and is terminated by a return. We suggest you set up your filename to backup to the same directory as your userlog using the the name **USERLOG.BAK**. So, assuming your userlog is on drive 2, **ULBACKUP.DAT** would contain one line with the filename **D2:PRO>USERLOG>USERLOG.BAK** followed by a return. How often you run the ULBACKUP is a function of where you have your userlog located. If it's on the hard drive or a floppy drive, once a day or once a week is probably fine. If you run the userlog out of a ramdisk, you might consider setting **ULBACKUP** to run after every call. Then if you lose power, you really haven't lost anything. When the power comes back on, recopy the userlog back to the ramdisk and you're back in business.

WHOMAINT.CMD is a command module that records the caller to the last 50 callers log which users can view using the **WHOCALL.CMD** module. By default, this module was automatically set up when you configured your sysdata.dat file to be the first event to run and will always run after every call. To insure the accuracy of your lastcall data file, we suggest you run it like this unless you do not wish to use the last call function on the board, in which case this module may be removed from the event scheduler. **WHOMAINT** will not record the logon of user number 10 (Sysop) or user number 11 (Co-Sysop) when they logon either locally or remotely. This is so you or your co-sysop may enter your BBS without the users being aware of the fact. The actual data filename is LASTCALL.DAT and is stored in the DATA subdirectory. This file does not need to pre-exist. WHOMAINT will create a new file if it cant find one. Should you ever need or want to, LASTCALL.DAT may be deleted without any ill effect. WHOMAINT will simply create a new one the next time it runs.

D.CMD is a command module which is an alternate to the Dos Shell's internal DIR command. D will list the files 2 to a line instead of the usual 1 per line.

EDITFILE.CMD is a command module which is used to edit text files while the BBS is running. EditFile is capable of editing a 255 line text file of up to 80 columns. EditFile is run from the Dos Shell by entering the module name. You may pass the filename as a parameter to EditFile or just be prompted for a filename by entering the module name.

VDEL.CMD is a command module which will ask for verification before deleting the file. It may be used as an alternate to the Dos Shell's internal ERASE and DELETE commands which do not ask for verification before deleting the file.

WHEREIS.CMD is a command module to be run from the Dos Shell which will locate a file or files based on the input filemask any where on the drive. For instance, keying a filemask D3:\>*.ARC would locate all files on drive 3 with an extender of ARC regardless of which subdirectory they were in.

VIEWEVNT.CMD is a command module to be run from the Dos Shell which will display the last run status of the event scheduler. It will list each event and the last date/time it was run with the a return code run status. A run status of 0 indicates the event ran successfully while a non zero return code indicates an error occured during execution. The error code will be a DOS return code. For example, a return code of 170 would indicate the event was looking for a file which it could not find.

UEXTEND.COM is a stand alone program to be used for extending your userlog. No matter how well you plan, the time may come when you run out of ID's in your userlog. **UEXTEND** will increase the current userlog by an additional number of entries that you specify when running the program. This program modifies the original userlog, so only 1 drive is required to perform this operation. ***But***, make sure you have a backup of the userlog ***before*** running this program. If something should happen like the drive fills up while the program is running, you can recover by copying your backup copy to the original userlog and try again. Run this program from the DOS prompt and follow the program prompts.

XMODEM.CMD is a command module available to the sysop for use directly in the Dos Shell or in Command Menus. The command syntax is:

Xmodem [S or R] Filename

S - tells PRO to SEND the file
R - tells PRO to RECEIVE the file

Filename - is the FULL pathname of the file.

Where To Get Help

In the event you need help configuring your BBS or need a question answered, you may call us voice at 804-794-9437 during evening hours (6 P.M. to 11:00 P.M. EST) or anytime during the weekend. Please be ready to give your serial number for varification before we can answer any questions. We will be glad to help any of our customers with the BBS, but absolutely *refuse* to assist a pirate of our products.

While on the subject of pirating, we ask that you *not* give a copy of our software products to *anyone*. We realize that for the vast majority of you, we don't even have to ask and we appreciate that. But, if one of you gives a copy out to a friend, before you know it, it's on every pirate board in the country. We would like to continue supporting the Atari 8-bit market in the future, and not giving out the programs ensures we will be around for many years to come with more products.

In addition, you may call one of the following BBS systems for support:

BBS Express! PRO Support BBS	**804-744-8897**	**3/12/24 24 hours**
Midnight Express BBS	**804-379-4156**	**3/12/24 24 hours**

Both these systems will have special message bases and file areas set aside for the exclusive use of registered owners. When calling these systems, leave your serial number in feedback to the sysop so they may validate you for these special areas. As upgrades occur and new modules are written, they will be placed on both these systems for you to download. It is up to you to check in periodically for upgrades or new modules. Both systems will have the same modules online, so it is not necessary to call both systems to get all the upgrades.

Transferring Ownership

We will transfer the ownership of your master disks to someone else if you decide to sell your copy. We need to be notified by you of this fact. If the new owner calls us for support (voice or BBS), we will not be able to offer support until the original owner notifies us of the transfer. A call to either support board, leaving email to the sysop will be sufficient, or a letter to **Orion Micro Systems** notifying us of the transfer. Once we have received notification, the new owner will receive the same support as if they had purchased the program directly from us.